

# SENATE BILL REPORT

## SHB 2817

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As Reported By Senate Committee On:  
Early Learning, K-12 & Higher Education, February 24, 2006

**Title:** An act relating to establishing a state priority and state objectives for access, enrollment, delivery, and degree achievements in the fields of engineering, technology, biotechnology, science, computer science, and mathematics in higher education.

**Brief Description:** Establishing a technology emphasis for institutions of higher education.

**Sponsors:** House Committee on Higher Education & Workforce Education (originally sponsored by Representatives Sells, McCoy, Strow, Dunshee, Lovick, Jarrett, Morris, Ormsby, Morrell, Haler, O'Brien, Fromhold, Ericks, Kilmer and B. Sullivan).

**Brief History:** Passed House: 2/09/06, 98-0.

**Committee Activity:** Early Learning, K-12 & Higher Education: 2/23/06, 2/24/06 [DPA, DNP].

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### SENATE COMMITTEE ON EARLY LEARNING, K-12 & HIGHER EDUCATION

**Majority Report:** Do pass as amended.

Signed by Senators McAuliffe, Chair; Weinstein, Vice Chair, Early Learning & K-12; Schmidt, Ranking Minority Member; Benton, Berkey, Carrell, Delvin, Eide, Kohl-Welles, Pflug, Rasmussen, Rockefeller, Schoesler and Shin.

**Minority Report:** Do not pass.

Signed by Senator Pridemore, Vice Chair, Higher Education.

**Staff:** Stephanie Yurcisin (786-7438)

**Background:** The Office of Financial Management (OFM) collects data on undergraduate enrollments and degrees produced in specific fields. Data published by OFM shows that, at the public four-year institutions in 2003-04, a total of 90,073 full-time equivalents (FTEs) were enrolled at the undergraduate level at public four year institutions. Four percent of all FTEs were enrolled in engineering and related technologies and two percent were enrolled in computer science studies at in-state public four-year institutions of higher education. Between the academic years of 1993-94 and 2003-04, there was a twelve percent decline in the number of FTEs enrolled in the fields of engineering and related technologies and a nearly nine percent decline in the number of bachelor's degrees conferred in these fields at public four year higher education institutions in Washington.

A recent joint study conducted by the Higher Education Coordinating Board (HECB), the Workforce Training and Education Coordinating Board, and the State Board for Community and Technical Colleges states that demand for workers trained at the baccalaureate level and higher in certain occupations is not met by supply. The study found that current degree production only meets 67 percent of the ultimate need in engineering and 56 percent of the

need in computer science. The study concludes that demands would best be met through increased enrollments in these disciplines.

**Summary of Amended Bill:** The Legislature finds that a priority on enrollments and degrees in the fields of engineering, technology, biotechnology, science, computer science, and mathematics is important to the state's economic future. Therefore, the Legislature intends to promote and place a priority on increased access, delivery models, enrollment slots, and degree opportunities in these fields.

Public institutions must determine local student demand and report findings to the HECB and the Legislature by November 1, 2008. The HECB will track and report progress, including:

- the number of students enrolled on a biennial basis;
- the number of associate's, bachelor's, and master's degrees conferred on a biennial basis;
- the amount of expenditures for enrollment and degree programs; and
- the number and type of public-private partnerships established.

The institutions are provided flexibility in their operations designed to achieve the objectives of increasing enrollment. For instance, the institutions could increase enrollment and degrees through establishing new institutes of technology, new polytechnic-based institutions, or new divisions of existing institutions. The institutions could also use an array of delivery models including face-to-face learning, interactive courses, internet-based offerings, and instruction on main campuses, branch campuses, and other educational centers. Given the relationship between technology institutes and institutions of higher education, the colleges and universities are encouraged to consider program growth in areas of the state with an aerospace, biotechnology, and technology industrial presence.

**Amended Bill Compared to Original Bill:** The amended bill change the timeline for HECB reporting on enrollment and degrees from an annual to a biennial basis. It also changes the three-year period in which higher education institutions have to determine demand to a specific deadline of November 1, 2008, and inserts a requirement for reporting findings and proposed alternatives to meet demand to the HECB and the Legislature. The amended bill also provides more flexibility for the institutions of higher education in terms of determining demand.

**Appropriation:** None.

**Fiscal Note:** Available.

**Committee/Commission/Task Force Created:** No.

**Effective Date:** Ninety days after adjournment of session in which bill is passed.

**Testimony For:** Only four percent of total enrollments at our four-year schools are in engineering, and only 17 percent are in math and all of the sciences combined. Jobs in these fields are left open because the employers cannot find properly qualified applicants from within the state. We need to take strong steps to encourage more capacity in these fields in our institutions of higher education. Business and industry regularly reports that they want to hire from local graduates but that there are not enough of them. Part of what this bill does is to help build interest in these fields; schools would begin to have early outreach to students and

would build very visible programs on campus so that more students would want to obtain degrees in these fields. Having to use a headhunter and then paying those fees seems like a waste because the qualified employees are most likely just moving from another in-state firm. The language regarding the student demand should be changed to reflect that the institutions should determine, not establish, this demand.

**Testimony Against:** None.

**Who Testified:** PRO: Representative Sells, prime sponsor; Loretta Seppanen, State Board for Community and Technical Colleges; Randy Spaulding, Higher Education Coordinating Board; Louise Stanton-Masten, Everett Area Chamber of Commerce; Christine Kerlin, Everett Community College; Crystal Donner, Perteet Inc.; Ann Anderson, Central Washington University.